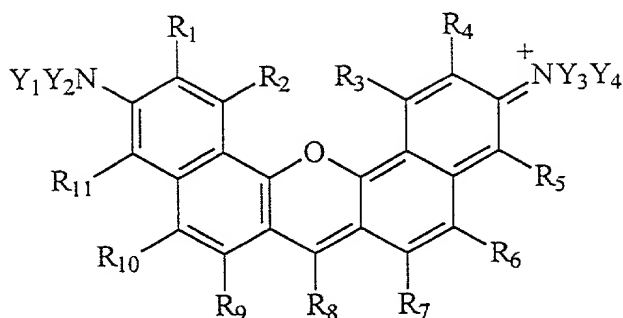
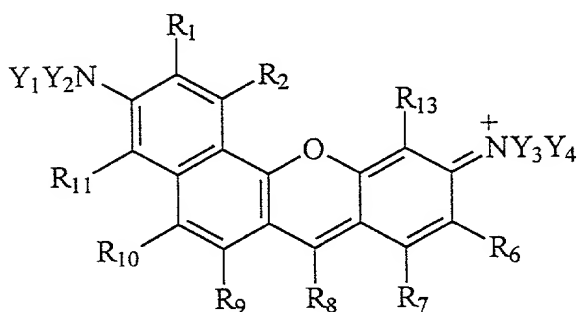


WE CLAIM:

1. An extended rhodamine compound having the structure



or,



wherein

R_1 taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, $-OS(O)_2OR$, $-S(O)_2OR$, $-S(O)_2R$, $-S(O)_2NR$, $-S(O)R$, $-OP(O)O_2RR$, $-P(O)O_2RR$, $-C(O)OR$, $-NRR$, $-NRRR$, $-NC(O)R$, $-C(O)R$, $-C(O)NRR$, $-CN$, and $-OR$, wherein R is independently selected from the group consisting of -H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, or, R_1 taken together with R_2 , Y_1 , or Y_2 is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ;

R_2 taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, -OS(O)₂OR, -S(O)₂OR, -S(O)₂R, -S(O)₂NR, -S(O)R, -OP(O)O₂RR, -P(O)O₂RR, -C(O)OR, -NRR, -NRRR, -NC(O)R, -C(O)R, -C(O)NRR, -CN, and -OR, wherein R is independently selected from the group consisting of -H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group¹ or, R_2 taken together with R_1 is selected from the group consisting of alkylene, alkylene independently substituted with one or more Z_1 , heteroalkylene, heteroalkylene independently substituted with one or more Z_1 , arylene, arylene independently substituted with one or more Z_1 , heteroarylene, and heteroarylene independently substituted with one or more Z_1 ;

R_3 taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, -OS(O)₂OR, -S(O)₂OR, -S(O)₂R, -S(O)₂NR, -S(O)R, -OP(O)O₂RR, -P(O)O₂RR, -C(O)OR, -NRR, -NRRR, -NC(O)R, -C(O)R, -C(O)NRR, -CN, and -OR, wherein R is independently selected from the group consisting of -H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group¹ or, R_3 taken together with R_4 is selected from the group consisting of alkylene, alkylene independently substituted with one or more Z_1 , heteroalkylene, heteroalkylene independently substituted with one or more Z_1 , arylene, arylene independently substituted with one or more Z_1 , heteroarylene, and heteroarylene independently substituted with one or more Z_1 ;

R_4 taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, -OS(O)₂OR, -S(O)₂OR, -S(O)₂R, -S(O)₂NR, -S(O)R, -OP(O)O₂RR, -

P(O)O₂RR, -C(O)OR, -NRR, -NRRR, -NC(O)R, -C(O)R, -C(O)NRR, -CN, and -OR, wherein R is independently selected from the group consisting of -H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, } or, R₄ taken together with R₃, Y₃, or Y₄ is selected from the group consisting of alkylene, alkylene independently substituted with one or more Z₁, heteroalkylene, heteroalkylene independently substituted with one or more Z₁, 5 arylene, arylene independently substituted with one or more Z₁, heteroarylene, and heteroarylene independently substituted with one or more Z₁;

R₅ taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z₁, heteroalkyl, heteroalkyl independently substituted with one or 10 more Z₁, aryl, aryl independently substituted with one or more Z₁, heteroaryl, heteroaryl independently substituted with one or more Z₁, arylalkyl, arylalkyl independently substituted with one or more Z₁, heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z₁, halogen, -OS(O)₂OR, -S(O)₂OR, -S(O)₂R, -S(O)₂NR, -S(O)R, -OP(O)O₂RR, -P(O)O₂RR, -C(O)OR, -NRR, -NRRR, -NC(O)R, -C(O)R, -C(O)NRR, -CN, and -OR, wherein 15 R is independently selected from the group consisting of -H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, } or, R₅ taken together with R₆, Y₃, or Y₄ is selected from the group consisting of alkylene, alkylene independently substituted with one or more Z₁, heteroalkylene, heteroalkylene independently substituted with one or more Z₁, arylene, arylene independently substituted with one or more Z₁, heteroarylene, and 20 heteroarylene independently substituted with one or more Z₁;

R₆ taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z₁, heteroalkyl, heteroalkyl independently substituted with one or more Z₁, aryl, aryl independently substituted with one or more Z₁, heteroaryl, heteroaryl 25 independently substituted with one or more Z₁, arylalkyl, arylalkyl independently substituted with one or more Z₁, heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z₁, halogen, -OS(O)₂OR, -S(O)₂OR, -S(O)₂R, -S(O)₂NR, -S(O)R, -OP(O)O₂RR, -P(O)O₂RR, -C(O)OR, -NRR, -NRRR, -NC(O)R, -C(O)R, -C(O)NRR, -CN, and -OR, wherein R is independently selected from the group consisting of -H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, } or, R₆ taken together with R₅, R₇, Y₃, 30 or Y₄ is selected from the group consisting of alkylene, alkylene independently substituted with one or more Z₁, heteroalkylene, heteroalkylene independently substituted with one or

more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ;

R_7 taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, $-\text{OS}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{R}$, $-\text{S}(\text{O})_2\text{NR}$, $-\text{S}(\text{O})\text{R}$, $-\text{OP}(\text{O})\text{O}_2\text{RR}$, $-\text{P}(\text{O})\text{O}_2\text{RR}$, $-\text{C}(\text{O})\text{OR}$, $-\text{NRR}$, $-\text{NRRR}$, $-\text{NC}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{NRR}$, $-\text{CN}$, and $-\text{OR}$, wherein
 R is independently selected from the group consisting of -H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, or, R_7 taken together with R_6 is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ;

R_8 is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 ;

R_9 taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, $-\text{OS}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{R}$, $-\text{S}(\text{O})_2\text{NR}$, $-\text{S}(\text{O})\text{R}$, $-\text{OP}(\text{O})\text{O}_2\text{RR}$, $-\text{P}(\text{O})\text{O}_2\text{RR}$, $-\text{C}(\text{O})\text{OR}$, $-\text{NRR}$, $-\text{NRRR}$, $-\text{NC}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{NRR}$, $-\text{CN}$, and $-\text{OR}$, wherein
 R is independently selected from the group consisting of -H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, or, R_9 taken together with R_{10} is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 ,

aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ;

R_{10} taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, $-\text{OS}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{R}$, $-\text{S}(\text{O})_2\text{NR}$, $-\text{S}(\text{O})\text{R}$, $-\text{OP}(\text{O})\text{O}_2\text{RR}$, $-\text{P}(\text{O})\text{O}_2\text{RR}$, $-\text{C}(\text{O})\text{OR}$, $-\text{NRR}$, $-\text{NRRR}$, $-\text{NC}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{NRR}$, $-\text{CN}$, and $-\text{OR}$, wherein R is independently selected from the group consisting of -H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, or, R_{10} taken together with R_9 or R_{11} is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ;

R_{11} taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, $-\text{OS}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{R}$, $-\text{S}(\text{O})_2\text{NR}$, $-\text{S}(\text{O})\text{R}$, $-\text{OP}(\text{O})\text{O}_2\text{RR}$, $-\text{P}(\text{O})\text{O}_2\text{RR}$, $-\text{C}(\text{O})\text{OR}$, $-\text{NRR}$, $-\text{NRRR}$, $-\text{NC}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{NRR}$, $-\text{CN}$, and $-\text{OR}$, wherein R is independently selected from the group consisting of -H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, or, R_{11} taken together with R_{10} , Y_1 or Y_2 is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ;

R_{13} taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl

independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, $-\text{OS}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{R}$, $-\text{S}(\text{O})_2\text{NR}$, $-\text{S}(\text{O})\text{R}$, $-\text{OP}(\text{O})\text{O}_2\text{RR}$, $-\text{P}(\text{O})\text{O}_2\text{RR}$, $-\text{C}(\text{O})\text{OR}$, $-\text{NRR}$, $-\text{NRRR}$, $-\text{NC}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{NRR}$, $-\text{CN}$, and $-\text{OR}$, wherein R is independently selected from the group consisting of $-\text{H}$, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, or, R_{13} taken together with Y_3 or Y_4 is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroarylno, and heteroarylno independently substituted with one or more Z_1 ;

Y_1 taken alone is selected from the group consisting of $-\text{H}$, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, and heteroarylalkyl independently substituted with one or more Z_1 , or Y_1 taken together with R_1 , R_{11} or Y_2 is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkylno, heteroalkylno independently substituted with one or more Z_1 , arylno, arylno independently substituted with one or more Z_1 , heteroarylno, and heteroarylno independently substituted with one or more Z_1 ;

Y_2 taken alone is selected from the group consisting of $-\text{H}$, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, and heteroarylalkyl independently substituted with one or more Z_1 , or Y_2 taken together with R_1 , R_{11} or Y_1 is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkylno, heteroalkylno independently substituted with one or more Z_1 , arylno, arylno independently substituted with one or more Z_1 , heteroarylno, and heteroarylno independently substituted with one or more Z_1 ;

Y_3 taken alone is selected from the group consisting of $-\text{H}$, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl

independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, and heteroarylalkyl independently substituted with one or more Z_1 , or Y_3 taken together with R_4 , R_5 , R_6 , R_{13} or Y_4 is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno,

heteroalkyleno independently substituted with one or more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ;

Y_4 is absent, or Y_4 taken alone is selected from the group consisting of $-H$, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, and heteroarylalkyl independently substituted with one or more Z_1 , or Y_4 taken together with R_4 , R_5 , R_6 , R_{13} or Y_3 is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ; and

Z_1 is selected from the group consisting of, $-R$, halogen, $-OS(O)_2OR$, $-S(O)_2OR$, $-S(O)_2R$, $-S(O)_2NR$, $-S(O)R$, $-OP(O)O_2RR$, $-P(O)O_2RR$, $-C(O)OR$, $-NRR$, $-NRRR$, $-NC(O)R$, $-C(O)R$, $-C(O)NRR$, $-CN$, $-O$ and $-OR$, wherein R is independently selected from the group consisting of $-H$, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group.

2. The compound of **claim 1** wherein Y_1 is taken together with R_1 or R_{11} and is C_2 or C_3 alkyleno or alkyleno independently substituted with one or more Z_1 , or Y_2 is taken together with R_1 or R_{11} and is C_2 or C_3 alkyleno or alkyleno independently substituted with one or more Z_1 , or Y_3 is taken together with R_4 or R_5 or R_6 or R_{13} and is C_2 or C_3 alkyleno or alkyleno independently substituted with one or more Z_1 , or Y_4 is taken together with R_4 or R_5 or R_6 or R_{13} and is C_2 or C_3 alkyleno or alkyleno independently substituted with one or more Z_1 .

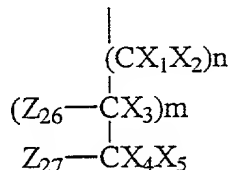
3. The compound of **claim 2** wherein the C_2 or C_3 substituted alkyleno is gem disubstituted with C_1 to C_3 alkyl.

4. The compound of **claim 3** wherein the C₂ or C₃ substituted alkylene is gem disubstituted with methyl.

5. The compound of **claim 1** wherein R₈ is alkyl independently substituted with one or more substituents selected from the group consisting of halogen, -C(O)R, and -S(O)₂R wherein R is independently selected from the group consisting of -OH, O-alkyl, -NH₂, N-alkyl and linking group.

6. The compound of **claim 1** wherein R₈ is -CF₃.

7. The compound of **claim 1** wherein R₈ is



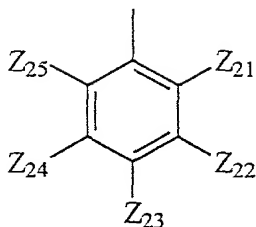
wherein Z₂₆ and Z₂₇ are each independently selected from the group consisting of hydrogen, -OS(O)₂OR, -S(O)₂OR, -S(O)₂R, -S(O)₂NR, -S(O)R, -OP(O)O₂RR, -P(O)O₂RR, -C(O)OR, -NRR, -NRRR, -NC(O)R, -C(O)R, -C(O)NRR, -NC(O)R, R, and -OR, wherein R is independently selected from the group consisting of -H, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, and X₁, X₂, X₃, X₄, and X₅ are each independently selected from the group consisting of hydrogen, -Cl, -Br and -F, wherein n and m are integers each independently ranging from 0 to 5.

8. The compound of **claim 7** wherein X₁ and X₂ are -H.

9. The compound of **claim 7** wherein X₁, X₂, X₄, and X₅ are each -F.

10. The compound of **claim 1** wherein R₈ is aryl or aryl independently substituted with one or more Z₁.

11. The compound of **claim 1** wherein R_3 has the structure



wherein Z_{21} , Z_{22} , Z_{23} , Z_{24} and Z_{25} each taken separately are Z_1 .

12. The compound of **claim 11** wherein Z_{21} , Z_{22} , Z_{23} , Z_{24} and Z_{25} are each independently selected from the group consisting of $-H$, halogen, C_1 to C_3 alkyl, $-C(O)OR$, $-C(O)R$, $-S(O)_2OR$, $-S(O)_2R$, and $-CH_2OR$, wherein R is independently selected from the group consisting of $-H$, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group.

13. The compound of **claim 11** wherein one or more of Z_{21} , Z_{22} , Z_{23} , Z_{24} or Z_{25} is $-Cl$ or $-F$.

14. The compound of **claim 11** wherein Z_{21} is $-C(O)OH$.

15. The compound of **claim 11** wherein Z_{21} is $-C(O)OH$ and one of Z_{23} or Z_{24} is $-C(O)OH$.

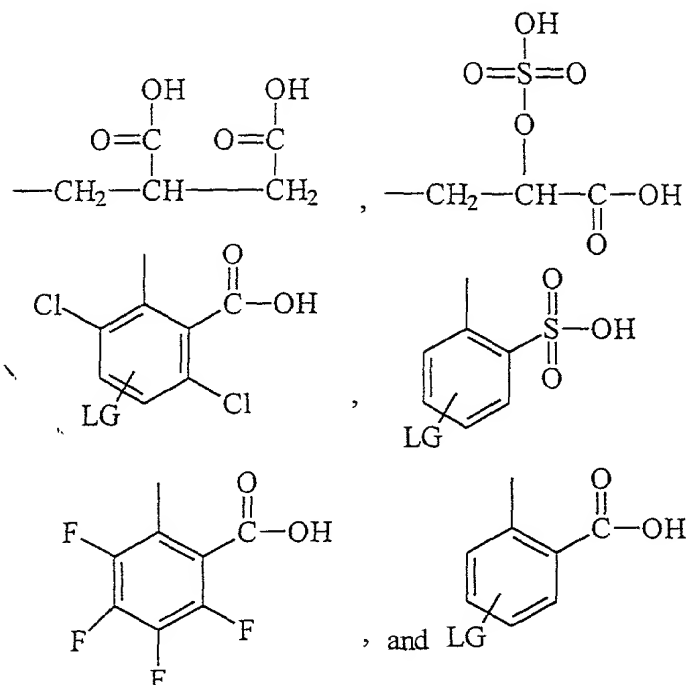
16. The compound of **claim 11** wherein Z_{22} and Z_{25} are each $-Cl$.

17. The compound of **claim 11** wherein Z_{22} , Z_{23} , Z_{24} and Z_{25} are each $-F$.

18. The compound of **claim 11** wherein Z_{21} is $-S(O)_2OH$ and one of Z_{23} or Z_{24} is $-C(O)OH$.

19. The compound of **claim 11** wherein Z_{21} is $-C(O)OR$ and one of Z_{22} , Z_{23} , or Z_{24} is linking group.

20. The compound of **claim 1** wherein R_8 is selected from the group consisting of



wherein LG is linking group.

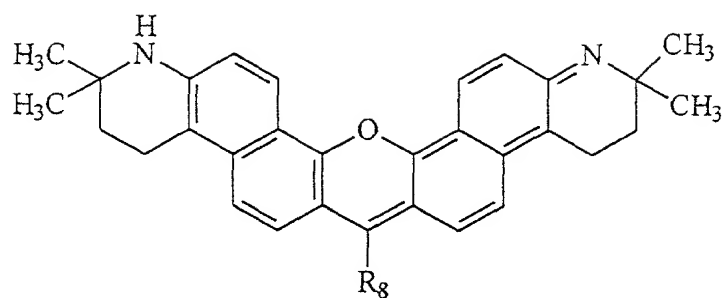
21. The compound of **claim 1** wherein at least one of Y_1 , Y_2 , Y_3 , or Y_4 taken separately is selected from the group consisting of —H , alkyl, aryl and arylalkyl.

22. The compound of **claim 1** wherein one or more of R_1 , R_4 , R_5 , R_6 , R_7 , R_9 , R_{10} , R_{11} and R_{13} is each independently $\text{—S(O)}_2\text{OH}$.

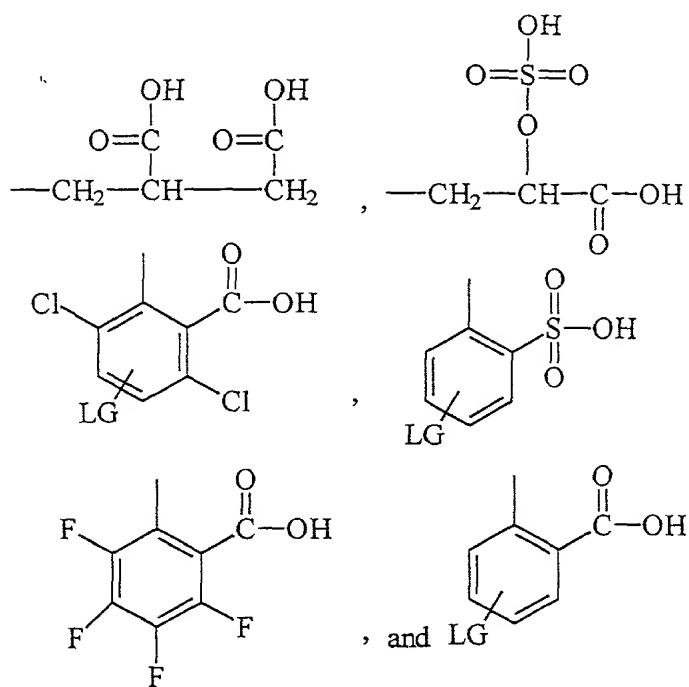
23. The compound of **claim 1** wherein one or more of R_1 , R_4 , R_5 , R_6 , R_7 , R_9 , R_{10} , R_{11} and R_{13} are each independently —F or —Cl .

24. The compound of **claim 1** wherein one or more of R_1 , R_4 , R_5 , R_6 , R_7 , R_9 , R_{10} , R_{11} and R_{13} is each independently aryl or aryl independently substituted with one or more Z_1 .

25. The compound of **claim 1** having the structure

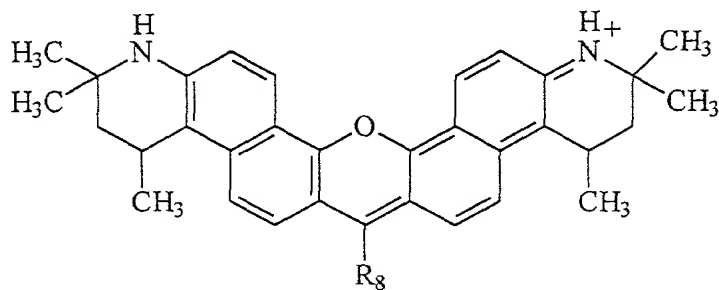


wherein R_8 is selected from the group consisting of

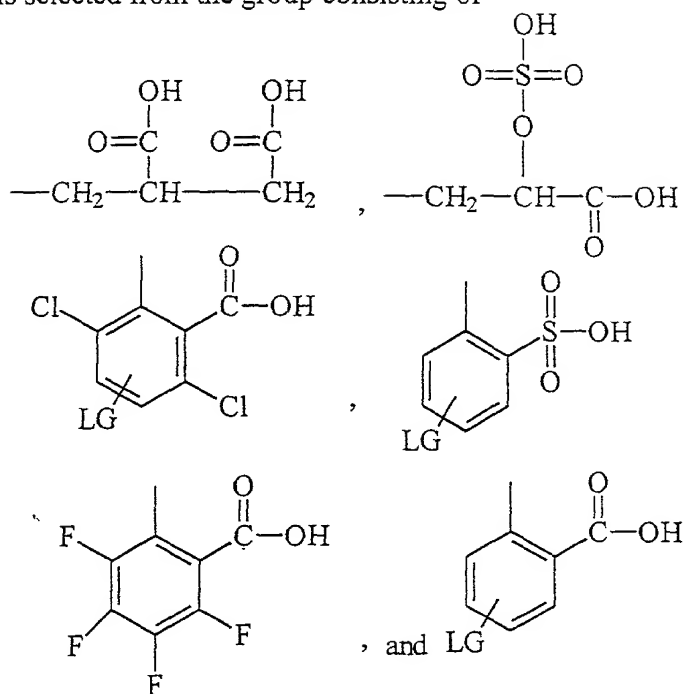


wherein LG is linking group.

26. The compound of **claim 1** having the structure

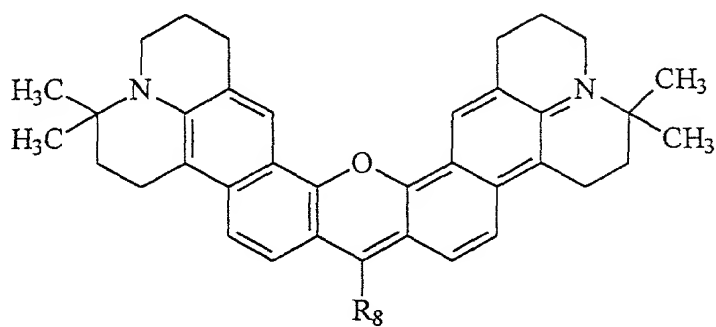


wherein R_8 is selected from the group consisting of

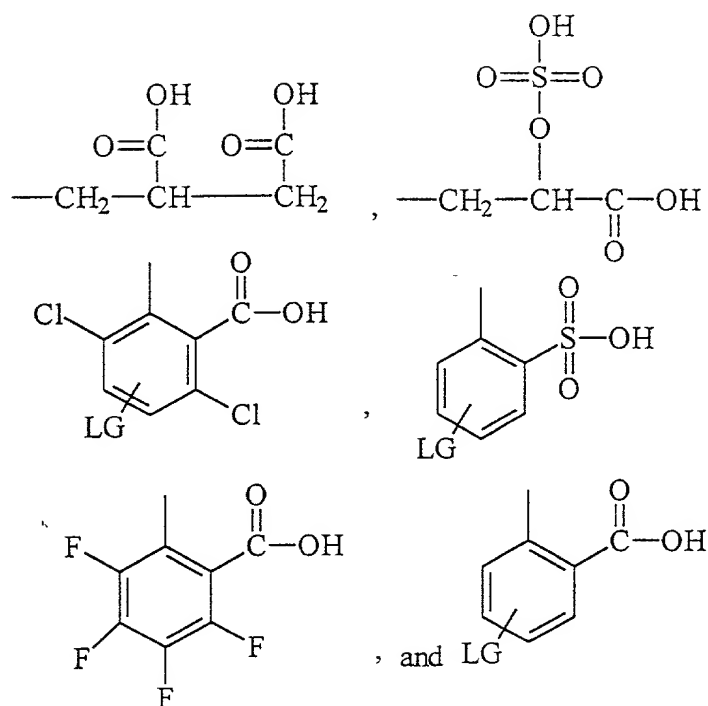


wherein LG is linking group.

27. The compound of **claim 1** having the structure

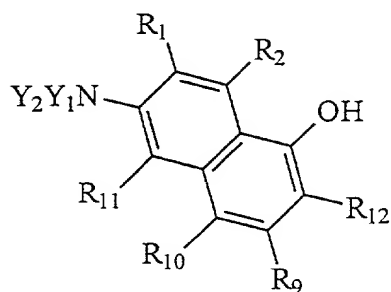


wherein R_8 is selected from the group consisting of



wherein LG is linking group.

28. An intermediate useful for the synthesis of extended rhodamine compounds
 having the structure



wherein

25 R_1 taken alone is selected from the group consisting of -H, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted

with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, $-\text{OS}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{R}$, $-\text{S}(\text{O})_2\text{NR}$, $-\text{S}(\text{O})\text{R}$, $-\text{OP}(\text{O})\text{O}_2\text{RR}$, $-\text{P}(\text{O})\text{O}_2\text{RR}$, $-\text{C}(\text{O})\text{OR}$, $-\text{NRR}$, $-\text{NRRR}$, $-\text{NC}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{NRR}$, $-\text{CN}$, and $-\text{OR}$, wherein R is independently selected from the group consisting of $-\text{H}$, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, or, R_1 taken together with R_2 , Y_1 , or Y_2 is selected from the group consisting of alkylene, alkylene independently substituted with one or more Z_1 , heteroalkylene, heteroalkylene independently substituted with one or more Z_1 , arylene, arylene independently substituted with one or more Z_1 , heteroarylene, and heteroarylene independently substituted with one or more Z_1 ;

R_2 taken alone is selected from the group consisting of $-\text{H}$, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, $-\text{OS}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{R}$, $-\text{S}(\text{O})_2\text{NR}$, $-\text{S}(\text{O})\text{R}$, $-\text{OP}(\text{O})\text{O}_2\text{RR}$, $-\text{P}(\text{O})\text{O}_2\text{RR}$, $-\text{C}(\text{O})\text{OR}$, $-\text{NRR}$, $-\text{NRRR}$, $-\text{NC}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{NRR}$, $-\text{CN}$, and $-\text{OR}$, wherein R is independently selected from the group consisting of $-\text{H}$, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, or, R_2 taken together with R_1 is selected from the group consisting of alkylene, alkylene independently substituted with one or more Z_1 , heteroalkylene, heteroalkylene independently substituted with one or more Z_1 , arylene, arylene independently substituted with one or more Z_1 , heteroarylene, and heteroarylene independently substituted with one or more Z_1 ;

R_3 is selected from the group consisting of $-\text{H}$, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 ;

R_4 taken alone is selected from the group consisting of $-\text{H}$, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or

more Z_1 , halogen, $-\text{OS}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{R}$, $-\text{S}(\text{O})_2\text{NR}$, $-\text{S}(\text{O})\text{R}$, $-\text{OP}(\text{O})\text{O}_2\text{RR}$, $-\text{P}(\text{O})\text{O}_2\text{RR}$, $-\text{C}(\text{O})\text{OR}$, $-\text{NRR}$, $-\text{NRRR}$, $-\text{NC}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{NRR}$, $-\text{CN}$, and $-\text{OR}$, wherein R is independently selected from the group consisting of $-\text{H}$, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, or, R_9 taken together with R_{10} is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ;

R_{10} taken alone is selected from the group consisting of $-\text{H}$, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, $-\text{OS}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{R}$, $-\text{S}(\text{O})_2\text{NR}$, $-\text{S}(\text{O})\text{R}$, $-\text{OP}(\text{O})\text{O}_2\text{RR}$, $-\text{P}(\text{O})\text{O}_2\text{RR}$, $-\text{C}(\text{O})\text{OR}$, $-\text{NRR}$, $-\text{NRRR}$, $-\text{NC}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{NRR}$, $-\text{CN}$, and $-\text{OR}$, wherein R is independently selected from the group consisting of $-\text{H}$, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, or, R_{10} taken together with R_9 or R_{11} is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ;

R_{11} taken alone is selected from the group consisting of $-\text{H}$, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, heteroarylalkyl independently substituted with one or more Z_1 , halogen, $-\text{OS}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{OR}$, $-\text{S}(\text{O})_2\text{R}$, $-\text{S}(\text{O})_2\text{NR}$, $-\text{S}(\text{O})\text{R}$, $-\text{OP}(\text{O})\text{O}_2\text{RR}$, $-\text{P}(\text{O})\text{O}_2\text{RR}$, $-\text{C}(\text{O})\text{OR}$, $-\text{NRR}$, $-\text{NRRR}$, $-\text{NC}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{R}$, $-\text{C}(\text{O})\text{NRR}$, $-\text{CN}$, and $-\text{OR}$, wherein R is independently selected from the group consisting of $-\text{H}$, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group, or, R_{11} taken together with R_{10} , Y_1 or Y_2 is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 ,

aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ;

R_{12} is selected from the group consisting of $-H$ and $-C(O)R_3$;

Y_1 taken alone is selected from the group consisting of $-H$, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, and heteroarylalkyl independently substituted with one or more Z_1 , or Y_1 taken together with R_1 , R_{11} or Y_2 is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ;

Y_2 taken alone is selected from the group consisting of $-H$, alkyl, alkyl independently substituted with one or more Z_1 , heteroalkyl, heteroalkyl independently substituted with one or more Z_1 , aryl, aryl independently substituted with one or more Z_1 , heteroaryl, heteroaryl independently substituted with one or more Z_1 , arylalkyl, arylalkyl independently substituted with one or more Z_1 , heteroarylalkyl, and heteroarylalkyl independently substituted with one or more Z_1 , or Y_2 taken together with R_1 , R_{11} or Y_1 is selected from the group consisting of alkyleno, alkyleno independently substituted with one or more Z_1 , heteroalkyleno, heteroalkyleno independently substituted with one or more Z_1 , aryleno, aryleno independently substituted with one or more Z_1 , heteroaryleno, and heteroaryleno independently substituted with one or more Z_1 ; and

Z_1 is selected from the group consisting of, $-R$, halogen, $-OS(O)_2OR$, $-S(O)_2OR$, $-S(O)_2R$, $-S(O)_2NR$, $-S(O)R$, $-OP(O)O_2RR$, $-P(O)O_2RR$, $-C(O)OR$, $-NRR$, $-NRRR$, $-NC(O)R$, $-C(O)R$, $-C(O)NRR$, $-CN$, $-O$ and $-OR$, wherein R is independently selected from the group consisting of $-H$, alkyl, heteroalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl and linking group.

29. The compound of **claim 28** wherein Y_1 is taken together with R_1 or R_{11} and is C_2 or C_3 alkyleno or alkyleno independently substituted with one or more Z_1 , or Y_2 is taken together

with R_1 or R_{11} and is C_2 or C_3 alkyleno or alkyleno independently substituted with one or more Z_1 .

30. The compound of **claim 29** wherein the C_2 or C_3 substituted alkyleno is gem
5 disubstituted with C_1 to C_3 alkyl.

31. The compound of **claim 30** wherein the C_2 or C_3 substituted alkyleno is gem
disubstituted with methyl.

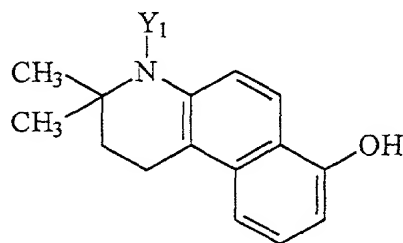
10 32. The compound of **claim 28** wherein at least one of Y_1 or Y_2 taken separately is
selected from the group consisting of $-H$, alkyl, aryl and arylalkyl.

33. The compound of **claim 28** wherein one or more of R_1 , R_2 , R_9 , R_{10} and R_{11} is each
independently $-S(O)_2OH$.

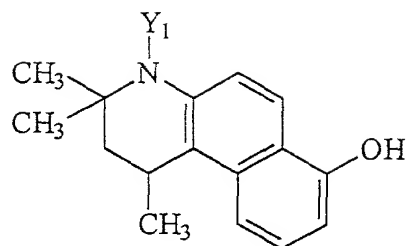
15 34. The compound of **claim 28** wherein one or more of R_1 , R_2 , R_9 , R_{10} and R_{11} is each
independently $-F$ or $-Cl$.

20 35. The compound of **claim 28** wherein one or more of R_1 , R_2 , R_9 , R_{10} and R_{11} is each
independently aryl or aryl independently substituted with one or more Z_1 .

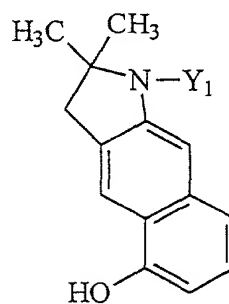
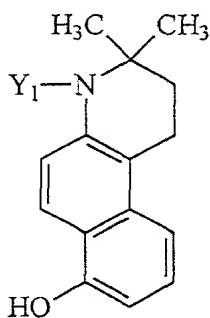
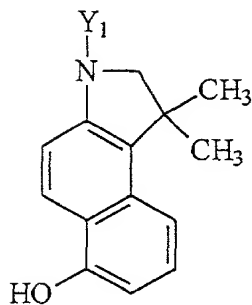
36. The compound of **claim 28** having the structure



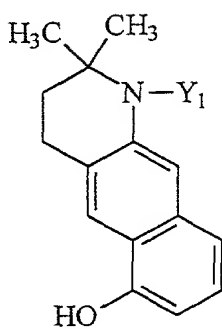
25 37. The compound of **claim 28** having the structure



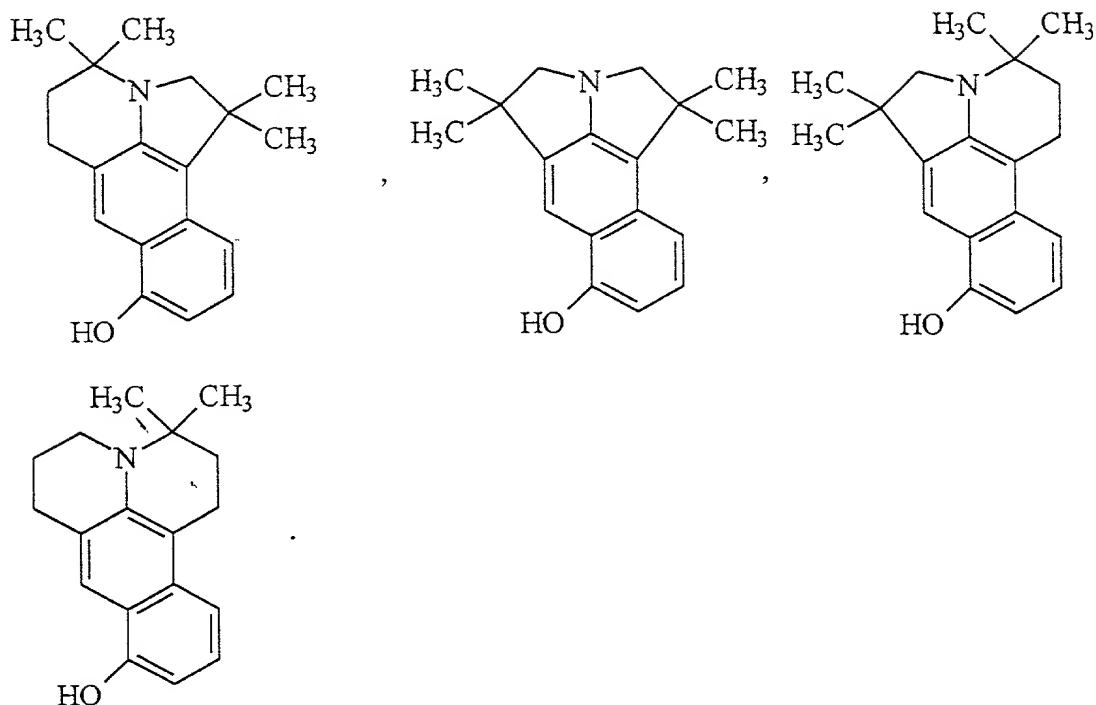
38. The compound of **claim 28** which is selected from the group consisting of



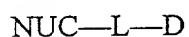
and



39. The compound of **claim 28** selected from the group consisting of



40. A labeled nucleoside/side having the formula:



wherein

NUC is a nucleoside/tide or nucleoside/tide analog;

L is a linkage;

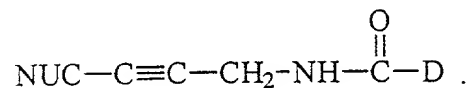
D is an extended rhodamine dye compound of **claim 1**;

wherein if NUC comprises a purine base, the linkage is attached to the 8-position of the purine, if NUC comprises a 7-deazapurine base, the linkage is attached to the 7-position of the 7-deazapurine, and if NUC comprises a pyrimidine base, the linkage is attached to the 5-position of the pyrimidine.

41. The labeled nucleoside/tide of **claim 40** wherein NUC comprises a base selected from the group consisting of uracil, cytosine, deazaadenine, and deazaguanosine.

42. The labeled nucleoside/tide of **claim 40** wherein NUC is a nucleotide terminator compound.

43. The labeled nucleoside/tide of **claim 40** having the structure



44. A method of fragment analysis comprising the steps of:

10 forming one or more labeled polynucleotide fragments, the fragments being labeled with an extended rhodamine compound of **claim 1**;

resolving the one or more labeled polynucleotide fragments; and

detecting the resolved labeled polynucleotide fragments.

15 45. The method of **claim 44** wherein the resolving step is an electrophoretic size-dependent separation process and the one or more labeled polynucleotide fragments are detected by fluorescence.